

FULL DOCUMENTATION SUPPORT FOR
A DETERMINATION OF NO ADVERSE EFFECT

Submitted Pursuant to
36 CFR Part 800.5(d)(1)(ii)
and in accordance 36 CFR Part 800.8(a)

for

Rehabilitation of State Bridge Number 69
Adams Dam Road (N232) over Wilson Run
Rockland, New Castle County, Delaware

State Contract No. 97-071-01
Federal Aid No. EBROS-N232(1)

Prepared by: Michael C. Hahn, AICP
Delaware Department of Transportation
Environmental Studies Section

Prepared
for
Federal Highway Administration

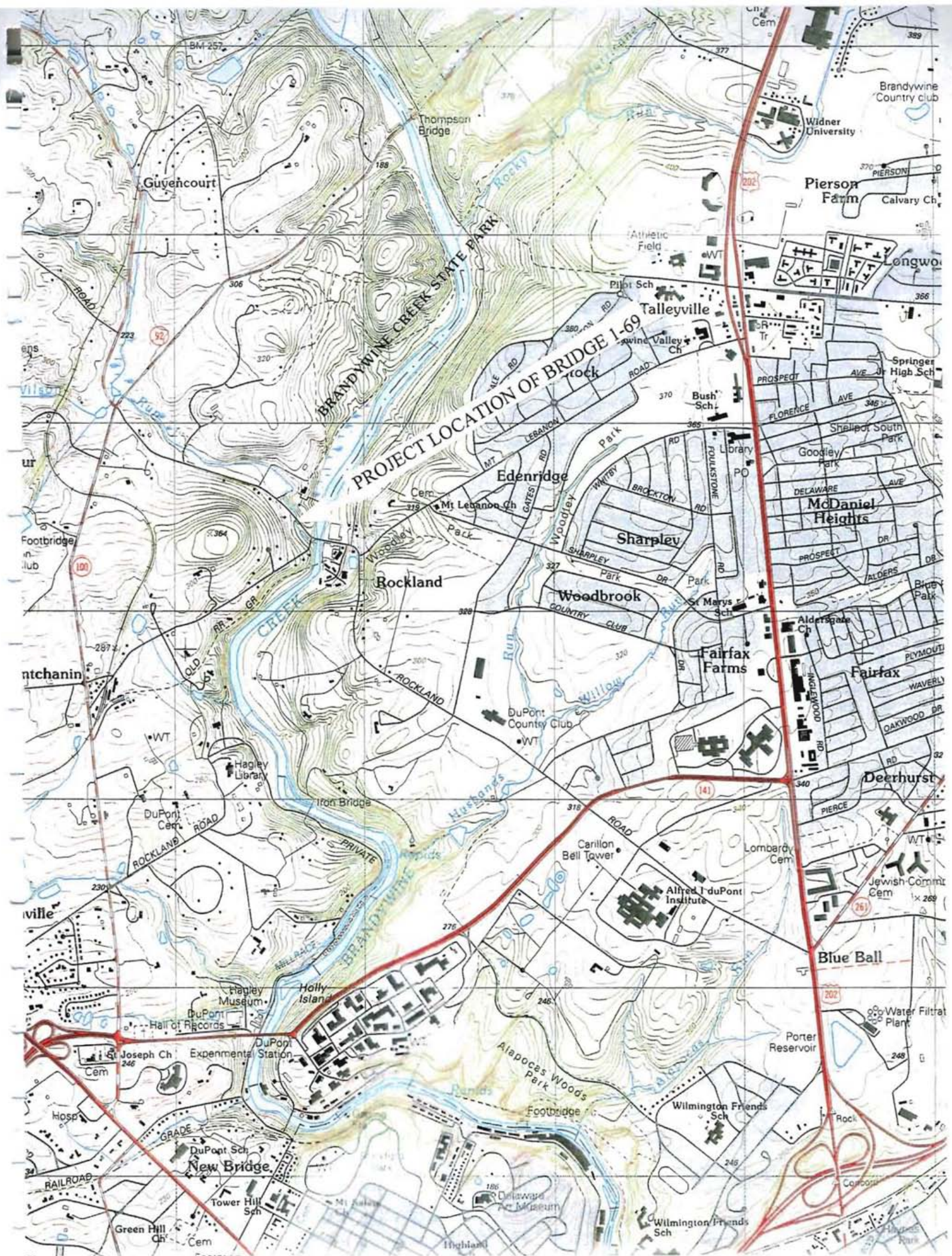
November 1997

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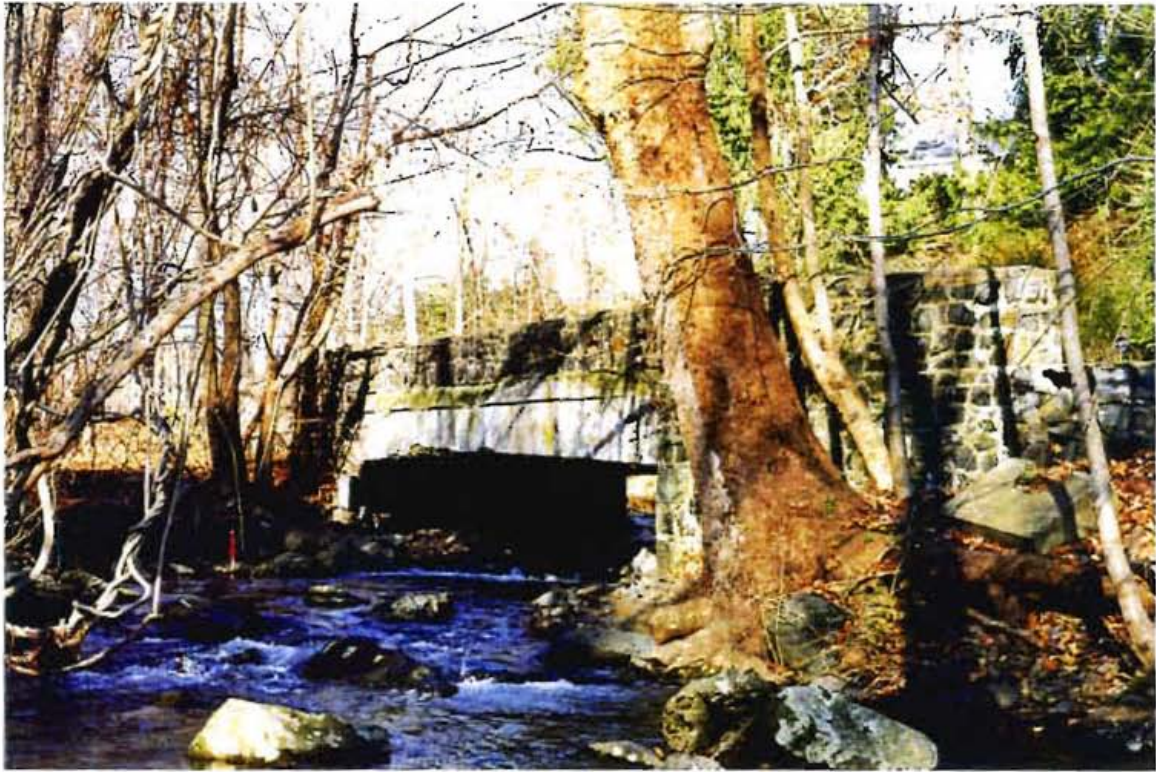




Bridge 1-69 along Adams Dam Road looking northwest



Bridge 1-69 along Adams Dam Road looking southeast



Bridge 1-69 looking north



Bridge 1-69 looking south

I. INTRODUCTION

The proposed undertaking is the rehabilitation by partial replacement of State Bridge Number 69. The structure is a small single span bridge that carries Adams Dam Road (N232) over Wilson Run. The project is located north of Wilmington (in Rockland), New Castle County, Delaware. The attached photographs and location map illustrate the project and location area of potential effect.

The Federal Highway Administration is the lead federal agency involved with this project. As such, the project is as follows:

The project involves minor rehabilitation and partial replacement of the bridge deck and superstructure in order to maintain a safe and adequate crossing for vehicles, bicyclists, and pedestrians. The scope of work is based on bridge inspection reports, test boarings of the deck, and professional and structural and engineering assessments.

II. DESCRIPTION OF PROPOSED UNDERTAKING

State Bridge No. 69 is an concrete girder bridge with a single span of 35'-6" (10.82 meters)(maximum). The 1934 bridge is built with a dangerous 30 degree skew. The bridge travel way carries two lanes of vehicular traffic. Because of the skew, the 20' (6.09 meters) deck varies in overall travel width. The bridge characterizes no shoulder, off-set, guardrail, or sidewalk area. The project is also characterized by steep slopes, wooded areas, and surrounding residential homes. The Bandywine Creek State Park is immediately north and nearly adjacent to the bridge location.

The structure consists of 16" X 24" (40.64 cm X 60.96 cm) rectangular concrete beams supported by random rubble abutments with U-shaped random rubble wing walls. The parapet walls are constructed with random rubble with a center section that is characterized by pointed arched openings. The parapets are also topped with peaked copings and are framed by raised end posts with pyramidal caps. The matching wing walls extend up the parapet height. The concrete fascia has a single scored horizontal line and is shaped as a shallow segmental arch.

Structurally the concrete deck is severely spalling, cracking, flaking, and rusting. Bridge inspection reports document that the superstructure is in poor condition with heavy cracking and leaching of the deck. Concrete beams, specifically the fascias, are deteriorated beyond any type of structural or cosmetic repair. The concrete deck underneath is also severely spalling. There is loss of mortar from various stone masonry work. There is evidence of scouring at the abutments which are within and along the stream channel.

Rehabilitation plans call for the replacement of the superstructure (i.e. deck and supporting beams, and parapets (just on the deck). Settlement/cracking and voids in the

abutment walls will also be addressed, where warranted, by repointing and remortar.

Where necessary, stone masonry within other abutment walls and parapets shall be repointed. Areas that have been subject to impact damage or voids will be repaired in-kind, too. All re-mortaring and stone shall be arranged to match existing designs, strength, composition, color, and texture. Mortar joint widths and joint profiles shall also be duplicated. In performing some of these operations, all removed stone and cracking mortar shall be removed by selected hand tools.

The new reenforced concrete deck will be supported by new reenforced concrete I-beams (not steel-encased concrete beams) that will lie on partially rebuilt abutment walls. The rebuilt parapets on the new deck will have a solid stone facing, as opposed to open sections. Concrete capping design for rebuilt parapet walls will be replicated to original design and configuration.

Other incidental work shall involve relocation of several utility poles. However, this work shall be accomplished and undertaken by others. This requires most, if not all, new right-of-way strips in the project area. This work will be limited to tree branch cutting, tree and/or rock clearance.

Minor right-of-way is also needed to perform the necessary work in order for DelDOT/FHA to repair and maintain Wilson Run's retaining wall to channel stream flow. However, no earth movement or ground disturbance (offsite/adjacent) will occur as rehabilitation is limited to on-deck roadway or minor river bank/wall areas which have already been heavily disturbed, cut, flooded, and/or cleared.

The only altered cosmetic feature of the bridge will be the complete stone facing of the parapets. Specifically, there will be no pointed arched openings of the deck's parapets. This is due to modern safety, design, and long-term maintenance reasons that determined the incorporation of arched openings were not ideal in this location.

However, when complete, the necessary work will safeguard the structural, load, design, and carrying capacity while avoiding any type of major bridge replacement that would significantly affect the entire aesthetic or engineering details of the bridge. The much needed rehabilitation will also assure a safe and convenient passage for vehicles as well as pedestrians, recreationists, and nearby transit users.

By providing the necessary rehabilitation, the remaining historic, architectural/engineering details, design, and materials will be enhanced and preserved for continual function. If repairs are not initiated soon, the deck and structural loads will deteriorate until bridge closure or failure.

Except for the differences in parapet facing, the project is considered to be a cosmetic and structural rehabilitation. Overall, the bridge will not be undertaking

significant functional, and/or aesthetic changes.

III. IDENTIFICATION AND DESCRIPTION OF HISTORIC PROPERTIES

As per 800.8(a)(3), efforts to identify historic properties included project initiation, consultation, and numerous scoping meetings with the DE SHPO. As a result, DelDOT and DE SHPO not only identified State Bridge No. 69 as being an individual historic structure, but identified the project area as lying within the Rockland Historic District.

The significance of the bridge lies in the fact that the bridge is a concrete girder with stone ornamentation. Survey results indicate that this masonry ornamentation of the concrete girder type was built only in New Castle County (for Delaware bridges), apparently in response to the picturesque surroundings characteristic of the area and perhaps to evoke historical associations with the turnpike era of the nineteenth century, when toll roads radiating around Wilmington, DE were carried on masonry structures. Several similarly embellished bridges were built by the Levy Court of New Castle County in the early 1930's; upon taking over responsibility for all road and bridge construction throughout the state in 1935, the State Highway Department continued the practice. Bridge Engineer A.G. Livingston of the State Highway Department was a champion of these stone-faced bridge, which were built in wooded, often park like settings; Livingston's notes and other documents indicate his strong feeling that a structure's surroundings should influence its form, and that the stone masonry was an appropriate response to the landscape of upper New Castle County. Notes on the drawing for State Bridge No. 70, another masonry embellished steel girder bridge constructed in the area in 1934, provide insight into the inspiration for this treatment: "the site shows exposed rock thickly located around the entire vicinity; construction should conform as closely as possible to the surrounding county." The embellishment of State Bridge No. 69 is also similar to State Bridge No. 70, constructed nearby in the same year. This bridge is also an unusually embellished example of the common concrete girder bridge type. Appendix A summarizes this historic significance.

As a result of the Delaware Historic Bridge Survey and Evaluation, conducted in 1988, State Bridge No. 257 was considered individually eligible for the National Register of Historic Places under Criteria C.

The project limits for State Bridge No. 69 also lie within the Rockland Historic District. This District was originally added to the National Register of Historic Places in February 1972, but the nomination is incomplete by present standards. Boundary limits are vague and property descriptions are inconsistent. In 1991, there was a proposed amendment to the nomination. However, the proposed amendment nomination has not been reviewed by the Delaware Review Board for Historic Preservation or been accepted/recognized by the DE SHPO. Nevertheless, with both the original and proposed nominations, the project area for State Bridge No. 69 remains within the boundary limits.

The Rockland Historic District represented one of the earliest and longest functioning mill areas of along the Brandywine Creek. John Gregg and Adam Kirk had a grist mill on the west bank of the Brandywine Creek in 1724. Starting with the smaller tributary's water power used in the 18th century for mills that were family run for local needs, it progressed to the 19th century mills using the full river's power and meeting the demands of a national market. The first fulling mill of Delaware was built in the Rockland Historic District in 1733, and in the early 1800's the stone mill that stands on the West bank housed some of the earliest cotton-spinning machinery in the US.

Within the Rockland Historic District, little remains from its first stages of industrial development except ruins. Rockland followed a typical village pattern of continued adaption, change, and abandonment in response (or as a result) to market demands, technology, and transportation advances. The layout of Rockland is essentially a series of roads converging at the Brandywine Creek with a large mill at the center. The extant structures are only a fragment of the once larger mill village and date in large part from the second half of the nineteenth century. Yet the vernacular nature of the remaining extant structures, show a continued use of forms established in the eighteenth century, giving somewhat deceptively early appearance. It is this continuity of layout (mills along a creek and linear development along the roads) and the use of traditional building materials and forms which give the Rockland Historic District its historical association and place among the industries along the Brandywine Creek.

There have been changes to the Historic District since it was originally nominated. Condominiums have been built next to the main Mill pond, and presently there are plans for more to be built (not near the project area, but within the District). The majority of industrial buildings have been demolished as well. Characteristics of the Rockland Historic District were documented in the 1972 nomination and the 1991 revised nomination (Appendix B). The District was found (or is considered) significant under Criterion A and C, industry and architecture.

IV. SUPPORT FOR A DETERMINATION OF NO ADVERSE EFFECT

Due to the proposed rehabilitation plans of State Bridge No. 69, the FHWA undertaking has an effect as defined under 36 CFR Part 800.9(a). However, this effect is not considered adverse.

As defined under 36 CFR 800.9(b), Criterion 1, the proposed undertaking may have an effect upon State Bridge No. 69, in that rehabilitation of the bridge may alter characteristics which may qualify the property of inclusion in the National Register of Historic Places. However, the proposed undertaking meets the exceptions to the Criteria of Adverse Effect.

As defined at 36 CFR 800.9(b), Criterion 1, the proposed undertaking will have an effect upon State Bridge No. 69, and the Rockland Historic District in that rehabilitation of

the bridge and removal and replacement of the entire deck alters characteristics which may qualify the property and District for inclusion in the National register of Historic Places. However, the proposed undertaking meets the exceptions to the Criteria of Adverse Effect. With respect to 36 CFR 800.9(c)(1), the values possessed by the deck configuration type can be substantially preserved through completion of appropriate research (in this instance, documentation to the standards of the Historic American Buildings Survey/Historic American Engineering Record). With this, the National Park Service has already been contacted in reference to the appropriate research and all procedures will be administered.

The remaining criteria of adverse effect under 36 CFR 800.9(a) do not apply. Under Criterion 2, the proposed work will not result in the isolation of the property or alteration of the character of its setting. This also includes the District.

Under Criterion 3, the project will not introduce visual, audible or atmospheric elements that are out of character with the property. This also includes the Rockland Historic District.

The proposed work will not perpetuate deterioration of the bridge or District under Criterion 4.

Under Criterion 5, the proposed work will not result in the transfer, lease or sale of the property or District.

The newly introduced feature, the stone facing of the replaced parapet walls is aesthetically pleasing and will not detract from the historic integrity of the bridge or District. In effect, the stone facing will nearly duplicate existing configurations, except for the openings. The stone shall match size and configuration.

In terms of other conditional measures, excess soils and construction debris will be disposed in a manor that will not disturb or potentially destroy any potential archaeological sites. An approved disposal site will be coordinated jointly between the DE SHPO and DelDOT. DelDOT does not object to this minor condition since it is regular contract stipulation within most of its federalized projects.

Based on the foregoing analysis and attached information, it is our opinion that State Bridge No. 69, a structure considered eligible for the National Register of Historic Places, will suffer no adverse effect as a result of the proposed rehabilitation work. In addition the Rockland Historic District will suffer no adverse effect, too.

V. DELAWARE STATE HISTORIC PRESERVATION OFFICE (DE SHPO) VIEWS AND OTHER INTERESTED PARTIES

Copies of various meeting/scoping minutes, the project initiation with the DE SHPO, and a public workshop notification, demonstrate government and public

involvement with an outreach program regarding this Determination of No Adverse Effect. These copies are attached.

At the public workshop, no historic preservation concerns or objections were raised. The only issue mentioned at the public workshop was the continued incorporation of a stone facing within the parapet walls, rather than the selection of solid concrete.

There has been no comments or concerns expressed with any of the other identified historic resource in the area with respect to the proposed rehabilitation work. There are no historical societies or interested persons within the project's region and state that have expressed concern for the proposed undertaking. In all, interested parties and the general public seem satisfied with the project.

REFERENCES CITED

P.A.C. Spero & Company

1991 *Delaware Historic Bridges: Survey and Evaluation*. DelDOT Historic Architecture and Engineering Series No. 89. Delaware Department of Transportation, Dover, Delaware.



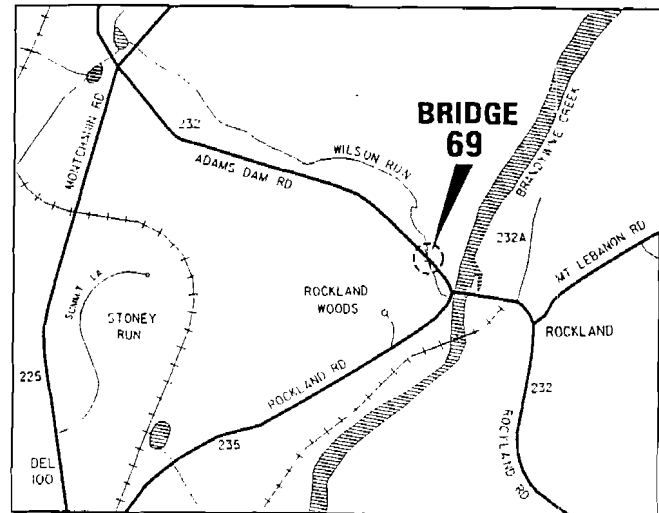
Delaware Department of Transportation
Anne P. Canby
Secretary

RECEIVED

JUN 11 1997

DEPT. OF TRANSPORTATION
DESIGN

PUBLIC WORKSHOP
BRIDGE 69 on Adams Dam Road
(N232) over Wilson Run
CONTRACT #97-071-01



The Delaware Department of Transportation (DelDOT) announces a public workshop for the proposed superstructure replacement of Bridge 69 on Adams Dam Road (N232) over Wilson Run, New Castle County. The meeting will be held on June 24, 1997 between the hours of 4:00pm and 8:00pm at the Brandywine Creek State Park, Park Office & Nature Center, Adams Dam Rd., Wilmington, DE.

The proposed work includes the replacement of existing beams with pre-cast prestressed box beams. Existing stone parapet will be replaced with concrete cored stone faced parapet.

Interested persons are invited to express their views in writing, giving reasons for support of, or opposition to the proposed. Comments will be received on site or can be mailed to DelDOT's External Affairs Office, P.O. Box 778, Dover, DE 19903. If requested in advance, DelDOT will make available the services of an interpreter for the hearing impaired. If an interpreter is desired, please make the request by phone or mail.

For further information contact the Office of External Affairs at 1-800-652-5600 (in DE) or 302-739-4313 or write to the Office of External Affairs at the above address.

PUBLIC NOTICE

September 12, 1997

302/739-4644

Ms. Joan Larrivee, Deputy Director
State Historic Preservation Office
15 The Green
Dover, DE 19901

**RE: BR 1-69, Semi-final plans
Determination Level; Project initiation
State Contract No. 97-071-01; Federal Aid Project Number: EBROS-N232(1)**

Dear Ms. Larrivee:

Submitted for your review and initiation last week were the semi-final plans for the above referenced project. Your staff has already been involved in scoping meetings and review with this historic bridge project. As a federal undertaking, our Department has reviewed the project plans and proposals. DelDOT via FHWA is establishing project initiation with your office. However, we are hesitant in determining effect levels with your office and prefer a joint consultation for the appropriate course of action. During our bi-weekly meeting of September 24, 1997 please be prepared to discuss plans and effect determination levels for the bridge, project area (Rockland Mills Historic District), and potential archaeological site. Thanks for your professional time and judgement.

If there are any questions on this, please contact Michael Hahn of my staff.

Very truly yours,
OFFICE OF PLANNING

Joseph T. Wutka, Jr.
Assistant Director of Planning

JTW/mh

cc: Robert Kleinburd, FHWA, Reality Officer
Raymond Harbeson, Chief Engineer
Eugene Abbott, Director of Planning
Chao Hu, Deputy Director of Preconstruction
Muhammad Chaudhri, Bridge Design Engineer
Therese Fulmer, Manager, Environmental Studies

APPENDIX A

HABS/HAER Inventory Card for Bridge 69

HABS/HAER INVENTORY

See "HABS/HAER Inventory Guidelines" before filling out this card.

1. NAME(S) OF STRUCTURE

State Bridge Number 69

2. LOCATION

Adams Dam Road over Waterway
Tavistock, New Castle County, Delaware

3. DATE(S) OF CONSTRUCTION

1934

4. USE (ORIGINAL/CURRENT)

Vehicular

5. RATING

CG

6. CONDITION

Good

7. DESCRIPTION

State Highway Bridge 69 is a concrete girder bridge with a single span of 35'-6" (maximum). It is built on approximately a 30 degree skew. It is 40'-0" wide (at widest point) and carries two lanes of traffic. The structure consists of 16" x 24" rectangular concrete beams supported by random rubble abutments with U-shaped random rubble wing walls. The parapet is also constructed with random rubble. It consists of a center balustrade with pointed arch openings, topped with peaked coping and framed by raised end posts with pyramidal caps. The wing walls extend to parapet height. The concrete fascia has a single scored horizontal line and is shaped as a shallow segmental arch.

8. HISTORICAL DATA

Delaware Department of Transportation records include drawings dated December 8, 1933 documenting the configuration and construction details of this structure. These drawings, prepared for the Levy Court by the Office of the County Engineer, indicate the scheme for placement of reinforcing steel within the concrete core of the masonry-faced bridge. Photo archive records at Delaware Department of Transportation confirm that the bridge was constructed in 1934, replacing an earlier steel pony truss bridge on rubble masonry abutments.

9. SIGNIFICANCE

State Bridge Number 69 is a concrete girder bridge with stone ornamentation. Survey results indicate that this masonry ornamentation of the concrete girder bridge type was built only in New Castle County, apparently in response to the picturesque surroundings characteristic of the area and perhaps to evoke historical associations with the turnpike era of the nineteenth century, when toll roads radiating around Wilmington were carried on masonry structures. Several similarly embellished bridges were built by the Levy Court of New Castle County in the early 1930's; upon taking over responsibility for all road and bridge construction throughout the state in 1935, the State Highway Department continued the practice. Bridge Engineer A. G. Livingston of the State Highway Department was a champion of these stone-faced bridges, which were built in wooded, often parklike settings; Livingston's notes and other documents indicate his strong feeling that a structure's surroundings should influence its form, and that the stone masonry was an appropriate response to the landscape of upper New Castle County. Notes on the drawings for Bridge 543, a masonry-embellished steel girder bridge constructed in the area in 1934, provide insight into the inspiration for this treatment: "the site shows exposed rock thickly located around the entire vicinity; construction should conform as closely as possible to the surrounding country." The embellishment of Bridge 69 is similar to that of Bridge 70, constructed nearby in the same year. This bridge is an unusually embellished example of the common concrete girder bridge type.

10. NAME(S) OF STRUCTURE

State Bridge Number 69

11. PHOTOS (W/ FILM ROLL & FRAME NO.) AND SKETCH MAP OF LOCATION

43B:28A-36A



43B:28A

Mack, Warren W. "A History of Motor Highways in Delaware", in Reed, Henry Clay, Delaware: A History of the First State, vol.2, pp.535-550 (NY: Lewis Historical Publishing Co., 1947).

Delaware State Program. Delaware State Highways; The Story of Roads in Delaware... [Newark, Delaware: Press of Kells, 1919].

Federal Writers' Project. Delaware: A Guide to the First State. (New York: Viking Press, 1938).

Delaware State Archives. State of Delaware, New Castle County Levy Court, Specifications, Proposals, Contract and Bond. ms., State Archives, Dover, DE.

Delaware State Archives. New Castle County Road Commissioners Papers, various years 1750-1940, ms. State Archives, Dover, Delaware.

Delaware DOT records: photo archives, contract files

Plans on file at Delaware DOT: Contract #BNC 73

13. INVENTORIED BY:

AFFILIATION

DATE

P.A.C. Spero & Company with Kidde Consultants for Delaware DOT

April-November 1988

APPENDIX B

Rockland Historic District Nomination Form

Form 10-300
(July 1969)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

N-343

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Type all entries - complete applicable sections)

STATE Delaware	
COUNTY New Castle	
FORM NPS USE ONLY	
ENTRY NUMBER	DATE

1. NAME			
COMMON NAME Rockland			
ALTERNATE NAME Kirk's Ford, Youngstown			
2. LOCATION			
STREET AND NUMBER Where Rockland Road and Mt. Lebanon Road join the Brandywine and Routes 232 and 235			
CITY OR TOWN Rockland			
STATE Delaware	CODE 10	COUNTY New Castle	CODE 003

3. CLASSIFICATION			
CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO THE PUBLIC
<input checked="" type="checkbox"/> District <input type="checkbox"/> Site <input type="checkbox"/> Building <input type="checkbox"/> Structure <input type="checkbox"/> Object	<input type="checkbox"/> Public <input checked="" type="checkbox"/> Private <input type="checkbox"/> Bank	<input checked="" type="checkbox"/> Occupied <input type="checkbox"/> Unoccupied <input type="checkbox"/> Preservation work in progress	Yes: <input type="checkbox"/> Restricted <input type="checkbox"/> Unrestricted <input checked="" type="checkbox"/> No
PRESENT USE (Check One or More as Appropriate)			
<input type="checkbox"/> Agricultural <input type="checkbox"/> Commercial <input type="checkbox"/> Educational <input type="checkbox"/> Entertainment	<input type="checkbox"/> Government <input checked="" type="checkbox"/> Industrial <input type="checkbox"/> Military <input type="checkbox"/> Museum	<input type="checkbox"/> Port <input checked="" type="checkbox"/> Private Residence <input type="checkbox"/> Religious <input type="checkbox"/> Seaport	<input type="checkbox"/> Transportation <input type="checkbox"/> Other (Specify) _____

4. OWNER OF PROPERTY			
OWNER'S NAME Too numerous to list			
STREET AND NUMBER			
CITY OR TOWN	STATE	CODE	

5. LOCATION OF LEGAL DESCRIPTION			
COURTHOUSE, REGISTRY OF DEEDS, ETC. New Castle County Court House			
STREET AND NUMBER Rodney Square			
CITY OR TOWN Wilmington	STATE Delaware	CODE 10	

6. REPRESENTATION IN EXISTING SURVEYS			
TITLE OF SURVEY Junior League Historic Buildings Survey and HABS			
DATE OF SURVEY: 1963-1964 <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> County <input checked="" type="checkbox"/> Local			
DEPARTMENT FOR SURVEY RECORD Historical Society of Delaware			
STREET AND NUMBER 509 Market Street			
CITY OR TOWN Wilmington	STATE Delaware	CODE 10	

SEE INSTRUCTIONS

STATE

COUNTY

ENTRY NUMBER

DATE

7. DESCRIPTION

CONDITION	(Check One)					
	<input type="checkbox"/> Excellent	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Deteriorated	<input type="checkbox"/> Ruined	<input type="checkbox"/> Unrecorded
	(Check One)			(Check One)		
	<input checked="" type="checkbox"/> Altered	<input type="checkbox"/> Unaltered		<input type="checkbox"/> Original Size		

DEPENDENT THE PRESENT AND ORIGINAL (If known) PHYSICAL APPEARANCE

It is at Rockland that the Brandywine starts its five mile descent to the tide waters, dropping 124 feet and providing the power for its many mills. Steep wooded hills descend to the Brandywine at Rockland where the full force of the river was dammed in 1794. The West bank is opened by two rolling hills and farm land by Wilson's Run, a stream that furnished power to the Rockland Mills in the 18th century. This area in back of Wilson's Run is now a State Nature Park. The East bank rises sharply to a plateau. This farm area is now given over to suburban housing and The Du Pont Country Club.

The hamlet of Rockland, halfway between Wilmington and the Pennsylvania State Line, was and still is a mill town. On either bank, joined by a bridge which was covered until 1934, are workers' houses. Although the community is now less autonomous without local stores, it still has its own Post Office. The school on top of the East bank's ridge stands as it did when built in 1831, although it has been adapted for private dwelling since 1930. There is the nearby Mt. Lebanon Methodist Church not far from the original Presbyterian Church that the mill owner, William Young, built for his workers on one slab of stone, and now razed. Further back on the plateau of the East bank on Black Gates Road is the Mansion House of William Young. This handsome whitewashed stone house was built in 1802. Raised on a grass terrace surrounded by stone walls, the two-story house with attic measure 50' x 34'. There are two identical five-bay facades on the East and West. The wood shingled, hip roof is topped with a small cornice under an almost flat metal roof which originally had a railing. Prominent brick chimneys are on each end. The two wood dormers with pitched shingle roof and arch topped window with Gothic muntins have nice detailing of keys and bands. The six-paneled front door with sidelights is flanked by pilasters supporting an arch with a large fan light. A hipped-roof porch protrudes, supported by square fluted columns with a flight of wood steps descending. The house has been little changed since it was built. It has a handsome, free-standing staircase in the entrance hall. The kitchen wing on the North end has had modifications.

The workers' houses, depicted so often by local painters, are set along the roads and on ridges of the hills. Simple stone, rectangular two-story buildings, they are whitewashed with one-story wooden shed, roofed porches, and square attic windows in the gabled ends. There are fewer of these houses than there were, although the mill itself is enlarged. Part of the original mills' walls remain, but they are insignificant in comparison to the large new buildings added by Concel, Inc. An excellent example of an early mill does still exist however, on the West bank. Once belonging to the Heshbon Factory, it still stands on top of the steep, rounded hill North of Wilson's Run where road #232 meets the Brandywine. It is a large, long, stone mill 83' x 21' with two stories on the East and three on the West side. Stone buttresses retain this wall. The wood shingled, pitched roof is continuous, end to end, with two slim

SEE INSTRUCTIONS

Form 10-22a
(July 1969)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Continuation Sheet)

STATE	
Delaware	
COUNTY	
New Castle	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

7. DESCRIPTION (cont'd.)

chimneys. The interior of the mill has been modified to fit the changing needs of the building. Used consecutively as stables, barn, living, and storage, it is in disrepair. There is still a mill wheel in the top story on the North end recording earlier industrial functions of the building. The original Gregg and Kirk Saw and Grist Mill that was where Wilson's Run joins the Brandywine, was transformed in the early 1900's into a six family dwelling house. It was known as The Kirk, but has been torn down. The bed of the raceway can be seen along road #232 that runs from Adam's Dam to Rockland.

On the hill next to the stone mill of the Heshbon Factory was The Kirk House. Built in 1797, it was badly burned and rebuilt in 1885. The exterior features of the house still keep the earlier Federal feeling. The House has a T-shaped plan. It has a three-story facade to the South with four bays, the top story having small square sash windows. Double parlors cover this facade on the interior with handsome identical black marble mantels of the early period. Numerous wings have been added.

The earliest mill owner's house, Rock Spring, is on road #235 from Rockland to Montchanin. It is a narrow 28' x 17' stone house, three stories high with an attic. The plan has two rooms on each floor, one front and one back with a large old fireplace on the ground floor. A center box stair winds through the house to all floors. A family account claims the house to have been built in 1694 originally with two stories and the roof sloping back one way against the rocks with another story being added later. Many adjustments have been made, but the house remains essentially that of the early Quaker farmers and millers. Set close to the rocks and adjacent to Rock Spring is The Springhouse. This is a fine old stone construction built around a large rock formation. It is L-shaped in plan with gable end towards the road and a porch extending along this end. On the interior, a walkway of stone runs center, front to back, with a brick floor under the water.

BOUNDARY DESCRIPTION

From the intersection of a small road with Rockland Road (1460 feet in north-westerly direction from the intersection of Black Gates Road and Rockland Road) N 70° W, 3060 feet to county road 235. Thence N 30° E, 2100 feet to county road 232. Thence North 800 feet, thence East 1830 feet, thence South 3660 feet to the place of beginning.

B. SIGNIFICANCE

PERIOD (Check One or More as Appropriate)			
<input type="checkbox"/> Pre-Columbian	<input type="checkbox"/> 16th Century	<input checked="" type="checkbox"/> 18th Century	<input type="checkbox"/> 20th Century
<input type="checkbox"/> 15th Century	<input type="checkbox"/> 17th Century	<input checked="" type="checkbox"/> 19th Century	

SPECIFIC DATUM (If Applicable and Known)			
AREAS OF SIGNIFICANCE (Check One or More as Appropriate)			
<input type="checkbox"/> Alter layout	<input type="checkbox"/> Education	<input type="checkbox"/> Political	<input type="checkbox"/> Urban Planning
<input type="checkbox"/> Archaeology	<input type="checkbox"/> Engineering	<input type="checkbox"/> Religion/Philosophy	<input type="checkbox"/> Other (Specify)
<input type="checkbox"/> Military	<input checked="" type="checkbox"/> Industry	<input type="checkbox"/> Science	
<input type="checkbox"/> Agriculture	<input type="checkbox"/> Innovation	<input type="checkbox"/> Sculpture	
<input checked="" type="checkbox"/> Architecture	<input type="checkbox"/> Landscape	<input type="checkbox"/> Social/Political	
<input type="checkbox"/> Art	<input type="checkbox"/> Architecture	<input type="checkbox"/> Literature	
<input type="checkbox"/> Commerce	<input type="checkbox"/> Literature	<input type="checkbox"/> Music	
<input type="checkbox"/> Communications	<input type="checkbox"/> Military	<input type="checkbox"/> Theater	
<input type="checkbox"/> Conservation	<input type="checkbox"/> Music	<input type="checkbox"/> Transportation	

STATEMENT OF SIGNIFICANCE

Rockland represents one of the earliest and longest functioning mill areas on the Brandywine. John Gregg and Adam Kirk had a grist mill on the West bank in 1724. The East bank is still being used by Concel, Inc. Rockland could serve as a miniature example of American Industrial history. Starting with the smaller tributary's water power used in the 18th century for mills that were family run for local needs, it progressed to the 19th century mills using the full river's power and meeting the demands of a national market. Rockland is particularly significant in the history of textiles. The first fulling mill of Delaware was built here in 1733, and in the early 1800's the stone mill that stands on the West bank housed some of the earliest cotton-spinning machinery in the United States. Paper was produced at Rockland also. In 1800, William Long was supplying paper to the U.S. Treasury, and paper has been produced on and off since then.

Rockland is interesting as a small mill town with its variety of mill owners' homes, workers' houses, and some good examples of vernacular architecture, barns, and springhouses. The Springhouse represents one of the earliest buildings done by the settlers. To keep the water source pure, small tight stone houses were built to protect the spring from leaves, animals, reptiles. Great care went into these small buildings throughout the 18th and 19th centuries and were an ever-present part of the Brandywine scene. They are now disappearing. A very handsome example of a springhouse adjoins land to Montchanin. According to family sources, the house was built in 1694 by John Gregg. If this is so, it would represent one of the earliest mill owner's house for it was John Gregg with Adam Kirk who ran the grist and saw mill at Rockland, and certainly represents the era of the early Quaker settlers that owned so much land on the Brandywine.

The other mill owner's house on the West bank built by Caleb Kirk in 1797, burned in 1881 and rebuilt in the same style and place in 1885. The present stone storage barn next to this house was the original mill for the Hesbion Factory, housing the early cotton-spinning machinery. Cloth caused the early move to an industrial process outside the family. The need to soften the house-woven material needed a professional dexterity, and often present along with the basic mills of grist and saw, was the fulling mill. This

Form NP-108a
(July 1969)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Continuation Sheet)

STATE	
Delaware	
COUNTY	
New Castle	
FOR NP USE ONLY	
ENTRY NUMBER	DATE

(Number off entries)

8. SIGNIFICANCE (cont'd.)

was also true because the fulling mill could not supply a full year's work. All three were present in Rockland in 1733 when Jonathan Strange built his fulling mill. In 1795, Caleb Kirk assumed the operations of the fulling mill and brought with him the saw and grist mills that he had inherited from his father, Adam Kirk. With Samuel Kirk in 1810, he founded the Heshbon Factory, but this soon failed as many textile industries did with competition from Europe, lack of raw materials, and skilled labor.

Sharing the building of the dam and the water rights across the river was William Young. He had come from Scotland in 1784 and moved from his book business in Philadelphia to start the Delaware Paper Co. at Rockland in 1793. When fire destroyed the paper mill in 1814, Young concentrated on producing cotton and woolen goods. As many as 300 people were employed here at the factory's height. But personal debts, floods, and nation-wide problems of textile industries brought failure. Young's son tried to continue, but there was a general decline. The property was sold by the U.S. Marshal in 1849. In 1860, Jessup and Moore took over and revived paper making. Today Concel, Inc., has a large paper plant here. The Young Mansion House on the hill behind was built in 1802 and still stands as an example of an early mill owner's wealth and taste. It has the Delaware Heritage Plaque and is recorded by local surveys of historic buildings. The William Young House represents the early 19th century relation of millowner's proximity to his mills and workers. As the markets grew, many more and unknown investors were called on and the actual owners might not know or participate in the mill. Today, the parent company of the Rockland Concel Mill is in Montreal, the home office in New York, and sister plants as far away as California.

8. MAJOR BIBLIOGRAPHICAL REFERENCES

Primary Sources

American Watchman, June 27, 1810; July 18, 1810; Dec. 7, 1811; Nov. 8, 1813; March 1, 1822; June 3, 1823; Jan. 13, 1826.

Assessment List, Christiana Hundred, 1815. Delaware State Archives, Dover, Delaware.

Bancroft, Joseph, "Notebook Kept While at Young Mill," Joseph Bancroft and Sons Co., Inc., Records, Wilmington, Delaware.

9. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY				LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES					
CORNER	LATITUDE		LONGITUDE			LATITUDE		LONGITUDE	
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
NW	39°	48'	10"	75°	34'	40"			
NE	39°	47'	59"	75°	34'	02"			
SE	39°	47'	26"	75°	34'	17"			
SW	39°	47'	43"	75°	34'	55"			

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: 160

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE

10. FORM PREPARED BY

NAME AND TITLE: Walter M. Webster, Consultant to

ORGANIZATION: Tri-County Conservancy of the Brandywine, Inc. DATE: July 6, 1971

STREET AND NUMBER: Box 141

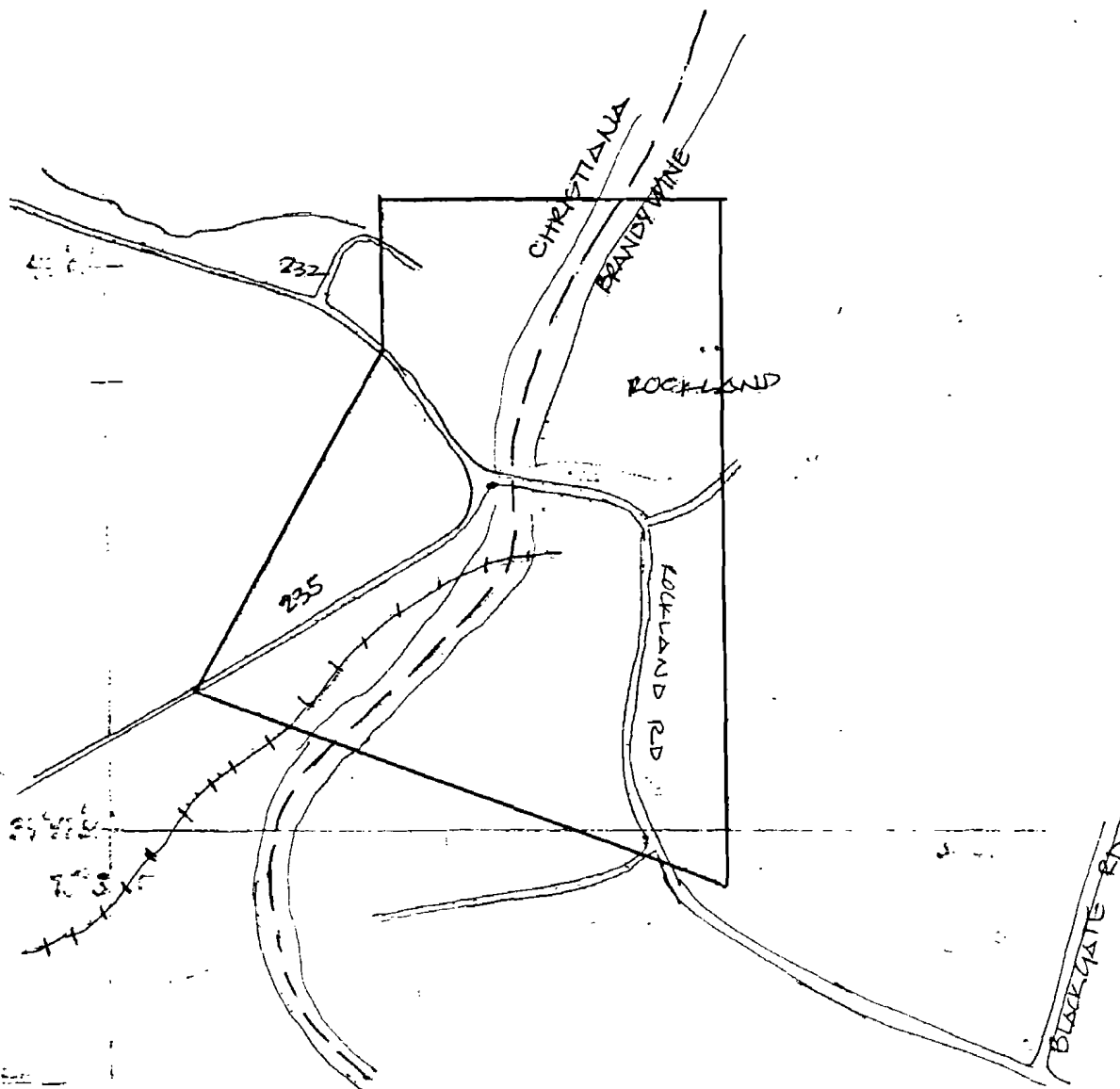
CITY OR TOWN: Chadds Ford STATE: Pennsylvania CODE:

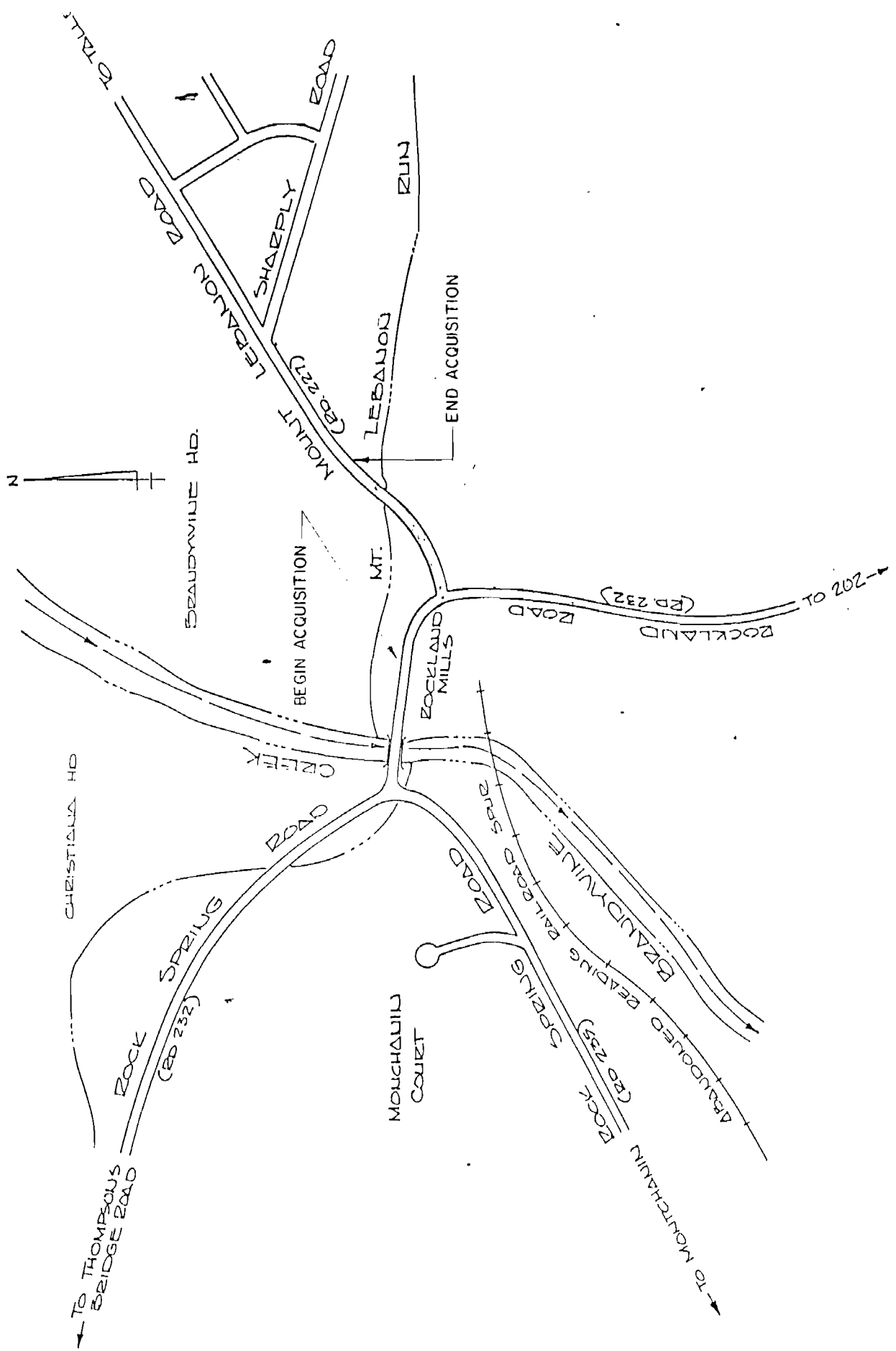
11. STATE LIASON OFFICER CERTIFICATION	NATIONAL REGISTER VERIFICATION
<p>As the designated State Liaison Officer for the National Historic Preservation Act of 1966 (Public Law 89-664), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. The recommended level of significance of this nomination is:</p> <p>National <input checked="" type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/></p> <p>Name: <u>Lee Shiller</u></p> <p>Historic Registrar, State Liaison Officer</p> <p>Date: <u>July 6, 1971</u></p>	<p>I hereby certify that this property is included in the National Register.</p> <p>Chief, Office of Archeology and Historic Preservation</p> <p>Date: <u>July 6, 1971</u></p> <p>Keeper of The National Register</p> <p>Date: <u>July 6, 1971</u></p>

SEE INSTRUCTIONS

ROCKLAND

1" = 800'





APPENDIX C

Letter of Comment from DE SHPO



STATE OF DELAWARE
DEPARTMENT OF STATE
DIVISION OF HISTORICAL AND CULTURAL AFFAIRS
HISTORIC PRESERVATION OFFICE

15 THE GREEN

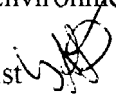
TELEPHONE: (302) 739 - 5685

DOVER • DE • 19901-3611

FAX: (302) 739 - 5660

January 26, 1998

MEMORANDUM TO: Therese M. Fulmer, Manager, Environmental Studies, DelDOT

FROM: Gwennyth A. Davis, Archaeologist 

SUBJECT: Rehabilitation of Bridge 1-69 (carrying Adams Dam Rd./Wilson Run) project; Rockland, New Castle County; State Contract No. 97-071-01; Federal Aid Project Number EBROS-N232(1); No Adverse Effect Determination

Attached please find a copy of the DE SHPO's concurrence with the No Adverse Effect determination concerning the above-referenced project. Fairly standard conditions are placed on this concurrence, with modifications due to the National Park Service's change in policy regarding HAER recordation. If DelDOT has any objections to these conditions, please notify us as soon as possible.

I have also looked over the NAE documentation itself, and find it complete and in keeping with our previous conversations about the project design. The only question I had about the plans concerns item 15 in the Project Notes (Sheet 3). Is an anti-graffiti coating really necessary here? We would prefer that this item be deleted from the contract. Minimally, you should avoid using a glossy type of coating (e.g., as employed at the Routes 92 & 100 project).

Thank you for your consideration of these comments. If you have any questions, please do not hesitate to call me.

Enclosure

cc: Joseph Wutka, Asst. Director of Planning, DelDOT
Michael C. Hahn, Senior Highway Planner, DelDOT



STATE OF DELAWARE
DEPARTMENT OF STATE
DIVISION OF HISTORICAL AND CULTURAL AFFAIRS
HISTORIC PRESERVATION OFFICE
15 THE GREEN

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DOVER • DE • 19901-3611

FAX: (302) 739 - 5660

January 26, 1998

MEMORANDUM TO: Joseph T. Wutka, Assistant Director, Planning, DelDOT

FROM: Joan N. Larrivee, Deputy State Historic Preservation Officer

SUBJECT: Effect on Resources of the Rehabilitation of Bridge 1-69 (carrying Adams Dam Rd./Wilson Run) project; Rockland, New Castle County; State Contract Number 97-071-01; Federal Aid Project Number EBROS-N232(1)

In accordance with the Advisory Council's regulations (36 CFR 800.9) and in consultation with the DE SHPO, the Federal Highway Administration (FHWA), through its designee, the Delaware Department of Transportation (DelDOT), has applied the Criteria of Effect and Adverse Effect to those properties within the above-referenced project area which are eligible for, or listed in, the National Register of Historic Places. These properties are: Bridge 1-69, and the Rockland Historic District. The FHWA has determined that the project will have No Adverse Effect on these historic properties.

We have reviewed DelDOT's Documentation of No Adverse Effect, which describes the reasons for making this determination, and we concur with the findings contained therein. This concurrence is conditioned on the following:

1. DelDOT has submitted to the DE SHPO photographic and historical documentation of the Bridge, in keeping with the guidelines of HAER; the DE SHPO will provide comments on the documentation package within 30 days of the receipt date (i.e., on or before February 19, 1998); if the DE SHPO requires no further photographic work, the project may proceed; if the DE SHPO determines that additional photographic work is necessary, DelDOT will ensure that this work is completed prior to beginning construction on the Bridge;
2. DelDOT will provide the DE SHPO with an opportunity to review and comment on the materials and methods employed for the stone facing and repointing work on the bridge;
3. DelDOT will notify the DE SHPO of any significant changes to the project methods, materials or design, particularly affecting more visible areas of the bridge (i.e., decorative details), and allow the DE SHPO sufficient time to comment prior to implementing such changes; and

Memorandum to J. Wutka
January 26, 1998
Page 2

4. DelDOT will instruct its contractor to provide, through the DelDOT District office, the DE SHPO with location information on proposed disposal site(s) for project-related materials, and to cooperate with SHPO staff if on-site inspection of disposal locations is necessary, prior to using such locations.

FHWA may submit this letter to the Advisory Council with the appropriate documentation, pursuant to 36 CFR 800.5(d)(1)(i) and in accordance with 36 CFR 800.8(a)(5). Thank you for your cooperation concerning this historic property. If you have any questions, please do not hesitate to call.

cc: Robert Kleinburd, Federal Highway Administration
Laurie Mutz, Philadelphia District, U.S. Army Corps of Engineers
Michael C. Hahn, Sr. Highway Planner, DelDOT
Valerie Cesna, Preservation Planner, New Castle Co. Dept. of Land Use
Jennifer Lukens, Coastal Zone Management Program, DNREC
Laura Herr, Wetland and Aquatic Protection Branch, DNREC

Terry Fulmer, DelDOT-Planning